

**INDUSTRIAL POLICY AND DECENTRALIZATION
IN THE ADOPTION OF THE STATE SYSTEM IN JAPAN**

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INTRODUCTION

Japan's centralized system of government contributed greatly to the nation's modernization after the Meiji Restoration and its rapid economic growth following World War II. Recently, however, the negative effects of the system's rigidity have been the subject of discussion. The stringency of national and local fiscal conditions is also recognized as a serious problem.

Under these circumstances, promotion of decentralization is being advocated in Japan. The reason for this is the belief that decision-making regarding policies and uses of taxpayer money should be undertaken at a lower level, i.e., one that is closer to local residents, in order to offer more resident-friendly and effective government services.

Thus, the argument advocating the introduction of the *doshusei*, which, literally translated, means "state system," into Japan has come to the fore as one concrete measure to address these issues. Although this has been a focus of debate for quite some time now in Japan, it has become particularly heated in recent years. The *doshusei* is a kind of federal system modeled after those in the United States and Germany, but there is still considerable controversy about its form, function, and so on, and a clear definition has not yet been formulated. Generally speaking, it would involve dividing Japan into about 10 *doshu* (states) and devolving much of the authority of the central government to them, as well as to cities, towns, and villages, in order to achieve decentralization.

Realistically, because of various kinds of resistance and obstacles, it might be difficult to introduce the *doshusei* into Japan immediately. At this point, it is not useless, however, to describe what *doshu* would be like if the introduction of the *doshusei* is realized. For *doshu*, the simultaneous devolution of authority and acquisition of self-determination mean self-responsibility. The local regions will no longer be able to expect to rely upon funds allocated

by the central government and must become truly autonomous and self-reliant. Under these circumstances, it is vital to introduce innovative policies of industrial promotion in order to establish an industrial basis on which the *doshu* would depend. For the purposes of discussion and argument about the advisability of the adoption of the *doshusei*, various opinions and viewpoints must be examined. Here, however, the argument is focused on the policy of industrial promotion in relation to the *doshusei*.

CHAPTER 1

THE PURPOSE OF THE *DOSHUSEI*

The ultimate purpose of the *doshusei* is to bring about decentralization by the devolution of budgets and authority from the central to the local governments. Concretely, for example, in quality-of-life fields – such as health, welfare, education, and local traffic – it would be more satisfactory for residents if the budget and authority were devolved to cities, towns, and villages, which are well versed in local conditions, and if their creativity and initiatives were thus encouraged. Moreover, an incentive for improvement in efficiency would also arise if they could determine their budgetary allotments on their own and make the appropriate requests in that connection. In addition, authority over budgets and other matters with regard to wide areas beyond cities, towns, and villages would be greatly devolved to the *doshu*. As a result, the authority of the central government would be limited to those issues that should be dealt with as a nation, such as foreign policy and diplomacy, national defense, financial policy, fundamental human rights, and adjustment among the *doshu*. (A minority of opinion supports the devolution of judicial power, and this question has yet to be settled.) Through this process, the *doshusei* would be a means of improving the rigid and inefficient centralized system, of addressing critical financial conditions, and promoting regional revitalization (Tables 1 and 2).

The matter of whether or not all cities, towns, and villages have the requisite capabilities is one of some dispute. There are more than 3,000 cities, towns, and villages in Japan, from government-designated cities such as Yokohama with a population of about 3.4 million to small villages with only hundreds of inhabitants. In government-designated cities, although there is a problem as to whether they can respond in small matters according to the residents' needs, this would be possible by coordination of role-sharing between the cities and the existing wards. On

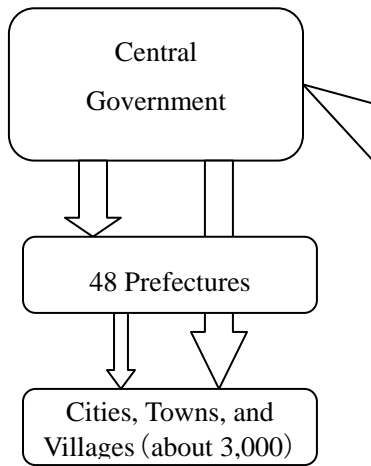
the other hand, what about smaller cities, towns, and villages? From the standpoint of finances and efficiency, conditions would be difficult. Moreover, because nowadays the scope of residents' activities is expanding beyond the borders of their cities, towns, and villages, it would be more realistic and effective to adopt larger areas. The Large Municipal Plan approved in 1969 and the recent promotion of municipal amalgamation (Table 3) are in keeping with this.

Then, how should the positioning of prefectures be characterized, after cities, towns, and villages are amalgamated and reduced in number and given authority over their budgets and other matters, but expanded in area in order to be self-reliant? It has been said that prefectures function somewhat like mezzanines between the central government and cities, towns, and villages, and this opinion will likely become more prevalent in the future. Thus, the role of the prefectures will become limited to broad-based areas that would be inefficiently dealt with by cities, towns, and villages, for example, infrastructures such as broad-based networks of roads, river management, and water and sewage. Moreover, policy-making connected to broad-based industrial promotion and improvement of institutions of higher education and research organizations can also be included in this category. As an optimal size, however, prefectures are too small and too numerous. As a result, the introduction of the *doshusei* is controversial.

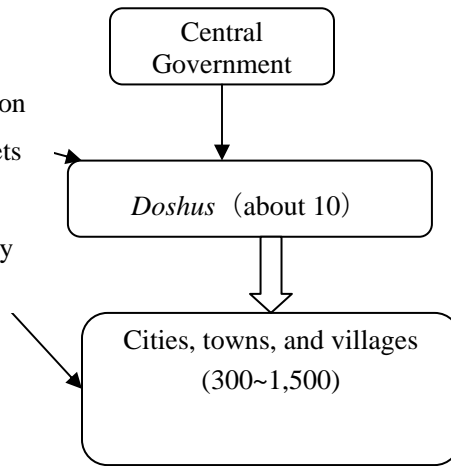
There is one important point, though, that should be addressed. Because this system is called the *doshusei* and it is often seen as antagonistic to and critical of the centralized system, it tends to be believed that the significance of the *doshusei* is to establish *doshu*. But this is wrong. The significance of the *doshusei* is to establish cities (and towns and villages) that are well versed in the actual conditions of their areas and also have self-reliant scales and capabilities. This point must never be forgotten as a most important premise of the argument in favor of adopting the *doshusei*.

Structural Change by the Introduction of the *Doshusei*

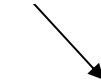
Present state



State after introduction of the *doshusei*



Devolution
of budgets
and
authority



CHAPTER 2

THE POSITIONING OF JAPAN AND THE CAPABILITIES OF *DOSHU*

When and if the *doshusei* is introduced in Japan, the question of the scales of the *doshu* in their population and economy and whether they are sufficient enough to be self-reliant will arise. There is a feeling, after all, that Japan is a small island country and that the centralized system is suitable, effective, and sufficient. Before any final decision, however, it is necessary to survey the scales of *doshu*, in addition to the positioning of nation as a whole. When he traveled to five European cities in 11 days, Satoshi Shima, a member of the House of Representatives, found it was not so different from going around Japan:

Japan is not a small country. The distance between Paris and Rome or Paris and Madrid is almost equal to that between Tokyo and Kagoshima. The distances between London and Paris and Paris and Bonn are shorter than that between Tokyo and Osaka, and are rather same as that between Tokyo and Nagoya or Tokyo and Sendai. In a word, Japan is about the same size as the unified EC. Japan is comparatively larger and Europe is comparatively smaller than we usually think.

In addition, he views the fact that cities in Japan are uniform and featureless, as opposed to cities in Europe in which various cultures thrive, as a problem.¹

Table 4 compares the land area, population, and GDP of a number of countries. It is clear that Japan is smaller than Russia, the United States, Canada, and Australia, for instance. It is by no means smaller, however, when compared with EU or ASEAN countries. Rather, it can be said it does extremely well by comparison when the population and GDP are taken into consideration. Even when it is compared with Germany, which has adopted the federal system, Japan has a larger land area, population, and GDP, so at least insofar as scale is concerned, it cannot be said that it would be difficult to introduce the *doshusei* into Japan.

¹“Chiiki Karano Shizukana Kakumei” 3.

Table 4 also includes each *doshu* after the introduction of the *doshusei*. Ideas differ as how to divide Japan into *doshu*, concerning, for example, how the metropolis of Tokyo or Okinawa Prefecture should be treated, or whether the current borders between prefectures should be retained. There is almost complete agreement, however, that the proper number of *doshu* should be approximately 10; so, for the purpose of illustrating the concept, the simplest idea is presented as follows:

Hokkai-*do*: Hokkaido

Tohoku-*shu*: Aomori, Iwate, Miyagi, Akita, Yamagata, Fukushima

Kanto-*shu*: Ibaragi, Tochigi, Gunma, Saitama, Chiba, Tokyo, Kanagawa, Niigata

Chubu-*shu*: Toyama, Ishikawa, Fukui, Yamanashi, Nagano, Gifu, Shizuoka, Aichi, Mie

Kinki-*shu*: Shiga, Kyoto, Osaka, Hyogo, Nara, Wakayama

Chugoku/Shikoku-*shu*: Tottori, Shimane, Okayama, Hiroshima, Yamaguchi, Tokushima, Kagawa, Ehime, Kochi

Kyushu-*shu*: Fukuoka, Saga, Nagasaki, Kumamoto, Oita, Miyazaki, Kagoshima, Okinawa

First, taking the land area, the population, and GDP, into consideration, each *doshu* is about the same size as a medium-level EU or ASEAN country. Furthermore, with respect to per capita GDP, they are at the high end. This shows that each *doshu* has the potential to promote its own industrial development and to be as economically self-reliant as an independent country.

There are, of course, economic inequities between *doshu*, and next big problem is how to resolve this issue.

CHAPTER 3

MAKING ADJUSTMENTS BETWEEN *DOSHU*

One of the reasons why the introduction of the *doshusei* into Japan is difficult is because the idea has not arisen from a spontaneous desire on the part of cities, towns and villages or their residents – a sentiment that should be generated naturally. This is obvious when the situation is compared with the origins of individual states in the United States or Germany. Of course, names such as Kanto, Kinki etc., which describe regions, have existed historically, and local instruments of government and economic organizations have operated within them. When the argument advances towards making each unit an independent and self-reliant *doshu*, however, various forms of resistance materialize. Representative of such opinions is the following: it is unfair to accept existing economic gaps between prefectures, which will compose *doshu*, from the beginning, and, without subsidies and distribution of local allocation taxes from the central government, the gaps will become larger because the present economic conditions of prefectures depend on them. Therefore, the conclusion is that the present financial re-distribution system should be maintained.

Currently in Japan, although a concrete movement to introduce the *doshusei* has not yet appeared, arguments in favor of decentralization and the devolution of authority and tax revenue resources to local governments have developed into a major trend, with a focus on the National Governors' Association. But the approach focuses more on an "in principle" effort than on particulars; and the most serious example of this involves financial re-distribution. Generally, there are the following three groups: prefectures that intend to compensate for budget squeezes with efficiency and innovative ideas; prefectures that claim it is impossible to perform without financial re-distribution; and Tokyo, which only contributes to the resources of re-distribution.

Although this is a major issue and a very difficult one, a tentative plan drawn up in 1993 by Shino Namikawa, Secretary General of the Citizens Forum for Renewal, who has written extensively about administrative and structural reform, is highly evocative.² First, he indicates the financial condition of the projected *doshu* had they been in existence in FY 1990, as shown in Table 5, which indicates that, under the conditions at that time, it would have been impossible for most *doshu* to be self-reliant.

His tentative plan tries to calculate the amount of adjustment that would be necessary if the present budget scales of the *doshu* remain unchanged. Next, it calculates the amount of adjustment necessary on two conditions, i.e., that: (1) all national tax payments can be used in the *doshu*, and, (2) in addition, the amount of national tax payments that does is not in balance with the economic scale of the *doshu* is revised according to the ratio of GDP (Table 6).

According to this tentative estimate (2), except for Hokkaido, no *doshu* needs to receive a fiscal adjustment. In this plan, Namikawa also discusses the idea of collecting a part of the national tax as a common tax for both the central and *doshu* governments. Of course, these proposals have attracted criticism. This plan clearly indicates, however, that there is the possibility of reducing gaps between *doshu* and shows the amount of adjustment necessary by innovations and reforms of the system.

But the argument is based on old figures, and, under current economic conditions, which are rapidly changing and increasingly globalizing, it is not necessarily guaranteed that each *doshu* will be able to maintain its industrial base. Thus, it becomes most important to ascertain how each city (town and/or village), which are fundamental units under the *doshusei*, will implement

²“Todofuken kara Shu-seifu e” 115.

policies to promote industrial development. By way of background before examining that issue, it is necessary to survey changes of the industrial structure in Japan.

CHAPTER 4

CHANGES OF THE INDUSTRIAL STRUCTURE IN JAPAN

It can be said that industry, which has supported Japan's economic base and development to date, is the manufacturing industry represented by the auto and household electrical appliance sectors. Needless to say, the contribution of the manufacturing industry to the development of local economies has been a major one. After World War II, the economic base of local areas in Japan was established by the presence of factories. Local governments have thereby been able to maintain a stable level of employment and to discourage out-migration. This situation is now threatened by China and ASEAN, however, and a number of manufacturing plants have already been relocated to these areas.

Under these circumstances, it is often said that it will be difficult to continue to depend on the manufacturing industry in the future and that the economic structure should be changed into an American-style model in which the service industry takes the lead. In fact, a research report by Mitsui Trust Holdings Inc. notes that, according to shifts in the nominal GDP and the number of employees by industries in Japan and the United States, the share of the manufacturing industry is decreasing, while that of the service industry is increasing in both countries. In addition, it notes that it is said that the United States is running 10 to 20 years ahead of Japan. Thus, the situation in Japan in 10 to 20 years can be foreseen by analyzing present conditions in the United States... the industrial structure in Japan will follow that in the United States, and the weight of the service industry will increase continually in the future (Figures 1 and 2).³

Research by the Development Bank of Japan also notes that:

³“1990-nendai no Nichibei-Sangyo-Kozo no Henka” 21, 32.

The trend of household consumption points to a gradual increase in the share of spending on services, with a substantial impact on industrial structure in terms of actual value. The rise in spending on services may also be confirmed from the changing composition of household consumption by industry, as almost 90 percent of the recent increase of household consumption has been allocated to the non-manufacturing (service) sector, which has also experienced a rise in the induced increment of production. Overall, the trend of consumption toward the service economy is expected to continue and will increase production in the non-manufacturing sector.⁴

The trend toward a service economy in the Japanese industrial structure is clear and inevitable, but, at the same time, there is a tendency to think that this means the decline of the manufacturing industry, which has been the cornerstones of the Japanese economy on up to now, and this exacerbates anxiety about the future.

Japan is a country that has to depend for natural resources, and even food, on imports. Therefore, it has to foster industries that can earn foreign currency, and, to date, the manufacturing industry has been playing this role. It is difficult, however, for the service industry, which is expected to characterize the post-manufacturing era, to fill that niche. This is because it is an industry that is based mainly on domestic demand, and, as such, it cannot expect to expand internationally in any significant way. In fact, the service trade in Japan has fallen behind that of the United States by a considerable margin, as indicated by the following:

Major players in service exports are advanced countries in which the trend of the service economy has advanced and a high technological level has been achieved. According to the IMF, the share of 23 advanced countries accounts for 71.7 percent of all of the world's service exports, and the share of only five countries (the United States, Britain, Germany, France, and Japan) accounts for 42.5 percent. The scale of the United States, accounting for 20 percent of the total, is particularly impressive. Japan's service exports in 2000 were \$69.2 billion, ranking fifth in the world. This was far behind the United States, which ranked first. On the other hand, Japan's service imports were \$116.9 billion, the largest except for the United States and Germany. As a result, the balance on service trade was a deficit of \$47.7 billion. Japan is the world's largest surplus country in tradable

⁴“Recent Trend in the Japanese Economy; Medium-term Outlook of Japanese Industrial Structure” 17.

commodities, but the world's largest deficit country, second only to Germany, in the service trade.⁵

Under these circumstances, it is anticipated that it will be extremely difficult to overcome the decline of the manufacturing industry and compensate for it by the promotion of the service sector. First of all, however, it will be necessary to ascertain whether the manufacturing industry is really declining or not.

⁵The Cabinet Office "Heisei 14-nendo Nenji-Keizai-Zaisei Hokoku" 176.

CHAPTER 5

THE POSITION OF THE MANUFACTURING INDUSTRY IN JAPAN

The research report by Mitsui Trust Holdings describes the transition of the position of the manufacturing industry in Japan as follows:

After World War II, the Japanese economy has been raising the weight of the tertiary industries in the nominal GDP as well as the number of employees. According to the real GDP base, however, the weight of the secondary industries and the manufacturing industry has decreased very little. This shows that the manufacturing industry in Japan has been steadily increasing its productivity of added value in the process of international specialization with the appreciation of the yen in the 1980's and globalization in the 1990's.... In the real GDP of the manufacturing industry, the real productivity of the electric machinery industry, in other words, the high-technology industry, has dramatically increased through the technical progress and quality improvement of products, in other words, through the IC revolution of the 1970's and 1980's and the IT revolution of the 1990's. And it is proper to understand that the expansion of productivity in this sector is the main factor that has maintained the share of the entire manufacturing industry in the real GDP (Figures 3, 4, 5, and 6).⁶

According to the real GDP, "it is proper to understand that the phenomenon by which the share of the manufacturing industry has been declining in the nominal GDP and the number of employees really reflects the good performance of this sector."⁷

In this manner, the manufacturing industry, in spite of its internal structural change, still maintains its position as an important economic base in Japan by continuing to improve labor productivity.

It is also true, however, that there is a prevalent fear that hollowing-out of industry may occur if the trends to globalization and the shifting of domestic manufacturing overseas continue.

⁶"Nippon no Sangyo-Kozo-Henka."

⁷"Heisei 14-nendo."

This anxiety has been caused by the recent economic growth in Asian countries, especially China.

It is proper, however, to understand this problem as follows:

In recent years, imports from China have certainly increased rapidly. This is true not only for labor-intensive products, but also in electric machinery, which, to date, has been considered knowledge- and technology- intensive. According to an analysis of imports from China, however, in the background of the phenomenon called modularization and the increase of direct investment in China, imports of labor-intensive products are increasing even in electric machinery products, and, in relation to this, Japan exports knowledge- and technology-intensive products in electric machinery products to China. Therefore, trade relations with China are not something special – it is a relation according to the principle of comparative advantage, the same as Japan has experienced in trade relations with Asian countries up to now.”⁸

This means that the expansion of the manufacturing industry in China will never lead directly to the decline of the manufacturing industry in Japan, but will instead contribute to the expansion of exports from Japan. For example, as the textile industry develops in China, the export of textile machinery from Japan will increase, or, as the output of personal computers increases in China, the export of integrated circuits from Japan will rise accordingly. Hajime Karatsu, Professor at Tokai University, who has worked at Matsushita Electric Industrial Co., Ltd. and is well versed in the manufacturing industry in Japan, describes this situation more concretely as follows:

In any field, whoever can make products of the same quality wherever, cheap labor costs can become a major advantage. In Japan, cheap and popular TVs or video recorders are virtually not produced. This is because of the high cost of Japanese labor. Then, have the Japanese who were once engaged in the production of TVs and video recorders lost their jobs? No. They are now working in production lines for more advanced products, such as large-screen plasma TVs or DVD recorders with built-in hard disks. The parts used for the final products as well as the products themselves are expensive; thus, the ratio of labor costs is relatively low. Moreover, because of high technology, which has replaced human labor in many cases, there are very few workers in Japanese factories. With this type of manufacturing, it does not matter whether labor is cheap or not.

⁸“Heisei 14-nendo” 162.

With regard to machine tools, Japan has one-third of the worldwide production. In a word, this means that one-third of global manufacturing is supported by Japanese machine tools.... with regard to industrial robots, Japan is overwhelmingly strong, with a 70 percent share worldwide.... manufacturing with high technology tends to reduce the number of workers, and it is robots and automatic machine tools that are supporting this trend. Japanese robots grasp the basis of state-of-the-art manufacturing....⁹

As mentioned above, it is difficult to conclude that the manufacturing industry in Japan has already declined. Thus, it is important to examine the factors that are supporting this stability of the manufacturing industry in Japan.

⁹“Chugoku wa Nippon o Oikosenai!” 53, 71.

CHAPTER 6

THE STRONG POINTS OF THE JAPANESE MANUFACTURING INDUSTRY

One strong point of the Japanese manufacturing industry is in the rationalized production process represented by Toyota's just-in-time system and the thorough quality control and improvement measures made possible by TQC (total quality circle) activities, or *kaizen*, which is now an internationally recognized concept in the world of manufacturing. Karatsu describes one example of this as follows: "One of the invisible reasons for the dramatic advancements of Japanese manufacturing is TQC. Through the exchange of ideas in the QC circle organized in each workplace unit and following through on them, production efficiency can be improved simultaneously with the quality of the final products."¹⁰

Another has been the achievement of a more efficient production process, high-quality product development, and, in addition, the development of products with entirely new concepts, by applying existing technologies and improving and fusing them. Michael H. Best, University Professor and Co-Director of the Center for Industrial Competitiveness at the University of Massachusetts Lowell, gives the following comparison between Japan and the United States:

New product ideas can be generated by coupling complementary technologies. Hence the task of [Japanese companies'] exchange group consortia is to link firms that have distinctive but potentially complementary technologies. The first major success story is mechatronics or the marriage of mechanical and electronic technologies.... American consortia focus more on basic research through the sharing of pre-competitive information and equal access, generally via breakthrough. They do not engage in joint product development or commercialization. Japanese exchange groups, on the other hand, are designed to identify innovative products by combining or reconfiguring existing technologies.¹¹

¹⁰"Chugoku wa Nippon o Oikosenai!" 93.

¹¹"Competitive Dynamics and Industrial Modernization Program: Lessons from Japan and America" 18.

On the other hand, Japan is often criticized for putting emphasis only on applied technology, while downplaying the development of basic technology, and there also is some anxiety that the burden of royalties for patents will increase sooner or later. As far as the number of patent applications is concerned, however, the situation is changing rapidly. Karatsu comments on this as follows:

According to the total number of patent applications, surprisingly Japan is ranked number one in the world, with more than 400,000 patents and utility models a year. The corresponding figure for the United States, which is in second place, is 150,000. In addition, as the number of patent applications around the world is about 1.3 million annually, the Japanese share amounts to 40 percent. As for patent applications from outside the United States to the United States, the number from Japan is the largest, almost half the total number of patent applications in the United States. As a result, Japanese companies are well represented in the top 10, which in 2003 were: IBM, Canon Inc., NEC, Micron Technology, Hitachi Ltd., Matsushita Electric Industrial Co., Ltd., Sony, GE, Mitsubishi Electric Corporation, and Samsung Electronics Co., Ltd.¹²

In addition, of course, basic technology is important. It cannot generate any value, however, unless it is advanced to applied technology and, moreover, to product development. What is more important is the real capability to gain an insight into the potential value of basic technology and to actually achieve product development. On this point, Best says:

The new technology paradigm, on the other hand, is about shifting the technological base from the science end of the spectrum to the production end.... Research in fundamental science is less important than cultivating the already existing technology base, which can be harvested for new technological combinations and permutations as part of the product development process.¹³

¹²“Chugoku wa Nippon o Oikosenai!” 75.

¹³“Competitive Dynamics” 4.

And Karatsu offers the following example:

With regard to the liquid crystal panel, RCA, which invented it, abandoned its development, and it was a Japanese company that succeeded in the commercialization of the product. The Japanese firm had a greater insight into its potential than the inventor company, stepped up efforts with a large amount of research and development, and finally achieved today's success.¹⁴

It is difficult for most small and medium-sized enterprises, however, to bear the heavy burden of research and development. On the other hand, there are 1 million blocking patents in Japan, 65 percent of which are dormant patents (unused patents) and half of them open patents. In 1997, the Patent Office of Japan started the Program for the Promotion of Patent Circulation. In addition, private companies participate in the business of patent circulation as intermediary agents. This is a good model to vitalize the strength of Japan with an attempt to bridge basic technologies, applied technologies, and product development in small and medium-sized enterprises.

As mentioned above, the manufacturing industry in Japan still maintains a competitive edge. Of course, it is necessary to continue to respond rapidly and flexibly to the increasing rise of globalization and the dizzying pace of change in economic circumstances. At the same time, is also necessary to continue to strengthen technology through research and development. As long as the manufacturing industry follows these practices, its competitive edge will not easily be eroded.

¹⁴“Chugoku wa Nippon o Oikosenai!” 118.

CHAPTER 7

THE DIRECTION OF INDUSTRIAL POLICY IN JAPAN

After reviewing changes in industrial structure and strength in Japan as above, the rough direction of a desirable industrial policy for the future can be described as follows:

- Maintenance of the manufacturing industry as an economic base and enhancement of its capability as a knowledge- and technology-intensive industry.
- Productivity improvement of the non-manufacturing industry for enhancement of the competitive edge of the manufacturing industry.
- Promotion and fostering of the service industry, which has a strong absorptive capacity for employment.

The importance of the manufacturing industry and the continuous and unrelenting efforts being exerted for productivity improvement have already been mentioned. In contrast, however, the productivity of the non-manufacturing industry still remains at a lower level. Although the non-manufacturing industry has been maintaining growth by input of capital and labor, productivity improvement must be a major focus for the future. This is due to the fact that it will become increasingly difficult to sustain growth by input of labor as the Japanese labor force declines as a result of a falling birthrate and an aging society. Moreover, this improvement is necessary for the manufacturing industry, because, if the productivity of the non-manufacturing sector does not increase and the price of service remains high, this will erode the competitive edge of the manufacturing industry in which the output of the non-manufacturing industry is used as intermediate input. The Mitsui Trust Holdings research report notes as follows:

The productivity of the public utility sector – in other words, electricity, gas, water, transport, and communications – remains at a low level in spite of its high capital equipment ratio. Of course, there is the fact that this sector, for example, electricity and

transport, has to possess equipment that can handle up to the peak demand, even though the demand changes according to time or season. The major cause for the low productivity here, however, is the insufficient relaxation of regulation of the government... Obviously, the output of the public utility sector becomes the input of the manufacturing industry... [According to the intermediate input into the manufacturing industry], the ratio of input from the service industry is at a high level, especially in the basic materials industry. Moreover, the basic materials industry produces intermediate inputs, such as electric machinery and transport equipment, into the processing and assembly industry. Therefore, in order to enhance the competitive edge of industries, especially of the manufacturing industry, productivity improvement and the reduction of the output price in the non-manufacturing sector are particularly important. Further progress of regulation reform in the non-manufacturing industry, especially in public utilities, is anticipated.¹⁵

Even if the manufacturing industry were maintained and enhanced in the future, its absorptive capacity for employment is certainly declining, and the alternative sector can be nothing but the service industry. At the same time, it will be important to promote and foster the service industry, for example, to encourage new entry by the relaxation of regulation, to privatize and industrialize services in the public sector, and to create new service industries that can respond to changes in the social structure. It is accurate, however, to view this not as the trend of the service economy in the industrial structure, but as the balanced upgrading of the industrial structure in which both the manufacturing and non-manufacturing sectors are closely connected with each other.

It is inevitable that the ratio of employment will migrate from the manufacturing to the service industry, which will absorb the results of this shift by employing former factory workers and other similar personnel. At the same time, there is concern that, even with this absorption, because of the falling birthrate and aging society, there will not be an adequate supply of labor for the Japanese service industry. The Development Bank of Japan research notes as follows:

Based on estimations of real output in each industry and the trend of labor productivity growth, it is calculated that demand for labor will decline by about 4 million persons from

¹⁵“Nippon no Sangyo-Kozo-Henka” 20.

2000 to 2020 in the manufacturing sector as a whole. This will be partially offset by an increase of some 2 million in the non-manufacturing sector, particularly in services. On balance, this means a net decrease of around 2 million workers in all industries. The employment structure will also shift toward the service economy as the share of the tertiary industries is expected to increase from 66 to 78 percent. Meanwhile, as mentioned earlier, labor supply will decline by 4 million people over the same period. Thus, a labor shortage of more than 2 million workers is expected as of 2020.¹⁶

This situation will apply to most regions of Japan. But the concentration of the service sector in the metropolitan Tokyo area is increasing; therefore, the outlying regions have already shouldered handicaps, and there is some anxiety that the structural change in employment cannot proceed smoothly. To change the trend of this concentration, more aggressive promotion of decentralization is required. And even if, in the medium and long term, a structural change in employment would be achieved, in the short term a mismatch between industry and employment must necessarily arise. Inter-industry job changes are particularly difficult for middle-aged and older workers. Moreover, in the rural areas, the presence of the construction industry, which is seriously suffering from the depression and the reduction of public works, is strong. Nonetheless, there is no other industry in such regions that has absorptive capacity for employment. These conditions raise the risk of increasing the unemployment rate and bringing about social unrest. Therefore, it is also important to establish some safety net, though self-help efforts are necessary as a premise to prevent moral hazard.

¹⁶“Recent Trend” v.

CHAPTER 8

INDUSTRIAL POLICY AS REGIONAL DEVELOPMENT POLICY

After reviewing the industrial policy of Japan as a whole, the next problem is how to reflect it in the policy for regional development.

To begin with, it is necessary to consider the definition of regional development policy, especially economic development policy. According to Richard D. Bingham, Professor of Public Administration and Urban Studies at Cleveland State University and Senior Research Scholar at the Maxine Goodman Levin College of Urban Affairs: “The economic development policies of local government are those designed to create private-sector jobs and wealth in the interest of the local population.”¹⁷

It is not an exaggeration to say that all the economic and industrial development policies in Japanese regions have been, if simplified, policies to attract companies and manufacturing facilities, which, in turn, aim to increase (or, at least, maintain) the population level by creating new employment opportunities. Of course, the buildup of the service industry is important, but it requires a corresponding increase of population and industries in which the output of the service industry is inputted, although some claim that this is a “chicken-and-egg” kind of situation. So it is the manufacturing industry that has been playing the role of creating new employment opportunities. Even now, the ratio of value-added production of the manufacturing industry and the unemployment rate are in inverse proportion. This indicates that the manufacturing industry is still playing an important role in providing employment opportunities, although its importance in this regard is declining.¹⁸

¹⁷“Economic Development Policies” 1.

¹⁸“Heisei 14-nendo.”

Of course, in order to enhance knowledge- and technology-intensive manufacturing, the central government has set up a policy to foster and promote state-of-the-art and venture industries by encouraging collaboration between industries and universities, and is trying to encourage this policy in outlying areas. There are two major problems, however, related to the concrete promotion of this policy.

The Limitations of Uniform Policies and the Necessity for Innovative Policies in Outlying Regions

The first of these major problems is that the local areas cannot demonstrate their innovative abilities. In Japan, once a policy is created, areas are designated nationwide to implement it. There are many industrial promotion policies, however. In addition, because of the negative effects of the vertically divided administration, there are also a number of policies with different principles, such as inducement to rural or depopulated areas, but with almost the same purposes. As a result, too many areas are designated all over Japan, and in some cases, areas are designated in prefectures next to one other with the same purpose. This causes even more problems.

First, because the central government designates these areas, municipalities scramble to adopt these policies without deliberate consideration, and the central government considers a regional balance by responding these myriad demands. As a result, many featureless areas are generated. In fact, there are quite a few areas that have become designated areas, but do not function as such at all. In the first place, each region has its own history of development, concentration of industries, and, needless to say, its original culture and geographic character. It is indispensable for each region to recognize its individual character, clarify and analyze its strong and weak points, and only then formulate the optimum policy for promotion and attraction of

industry. Here, the limitations of central government policies, which attempt to implement industrial promotion connected with uniform regional development policies, are exposed. Policymakers in Japan, both in the central government and municipalities, should heed the following recommendations concerning industrial promotion in the United States:

Industrial policy must start with a strategic assessment of a region's (or nation's) basis for competitive advantage in the global marketplace.... The task is to objectively assess a region's (or nation's) strength and weakness relative to those regions that enjoy global industrial leadership, sector by sector.¹⁹

Create a powerful self-assessment tool for cities to better clarify their economic development goals and identify their competitive strengths and weakness relative to other (urban) locations.²⁰

The second sub-problem relates to support measures that accompany these policies. Generally, these are packages of tax incentives, subsidies, and policy-based finance. There are almost no differences between measures, however, and they are neither generous nor sufficient, because the limited budget is scattered over too many designated areas without any particular focus. The reason why municipalities want to be designated despite these poor support measures is partly because they may really need even poor support in view of financial stringency, but mainly because they do not want to be left behind other municipalities. It is better for these municipalities, however, to recognize that it will be difficult to attract industries or companies with lukewarm support measures. Rather than that, it will be more important and effective to clarify and analyze barriers that prevent them from attracting industries and companies in advance and try to remove such barriers as described below:

¹⁹“Competitive Dynamics” 8.

²⁰“The Rebirth of Older Industrial Cities: Exciting Opportunities for Private Sector Investment” 5.

Traditional public sector financial tools such as tax abatements, tax credits, and subsidies, while often strategically important as deal closers, are not sufficient to attract high value business investment if previous deal breakers are not overcome. Our interviews revealed that most firms contemplating a location decision initially consider such factors as private land cost, transportation, public safety, and the ability of municipal leaders to overcome development process barriers before they consider the value of various tax incentives and subsidies. Hence, cities that try to sell themselves solely on the grounds of low taxes are likely to attract few firms and particularly few high-value, stable companies.... State and local officials need an effective protocol for communication and coordination on permits, grants, contracts, and information necessary to expedite location decisions and can potentially forego granting a tax subsidy if they pay attention to reducing these other costs.²¹

The third sub-problem is that, in many cases, the nuclei of these designated areas are newly constructed research or industrial parks. These facilities tend to be constructed in suburban locales far from existing industrial centers. This is because of lower land prices coupled with the necessity for large building sites. Obviously, new costs are required to construct these parks and the necessary infrastructure. Moreover, if a similar park is constructed in a neighboring municipality, there is the risk of overlapping investment. Most notably, this kind of construction neglects the importance of proximity to the industrial base that its region has been fostering and of the dense communication network that is indispensable for promotion of knowledge- and technology-intensive industry. This point is reflected in many research findings in the United States. For example:

Firms located or expanded in the region – in spite of relatively high costs – in order to become part of its social and technical networks. Geographic proximity allowed firms to monitor emerging technologies closely and avoid being caught off guard by unanticipated breakthroughs. It provided the advantage of speed, as local firms learned about market changes before others did. And it facilitated the frequent face-to-face communication needed for successful collaboration, while also intensifying competitive rivalries.²²

²¹“The Rebirth of Older Industrial Cities” 15.

²²“Regional Advantage: Culture and Competition in Silicon Valley and Route 128” 156.

And:

One life science spokesman said he would not consider a Greenfield site because the company thrives on daily proximity to university professors and students and to hospital researchers – most of whom are located in older cities. He mentioned that Cambridge is recognized worldwide as a cluster for biotechnology based on Harvard University and MIT. The existence of millions of square feet of underutilized or abandoned factory buildings in East Cambridge a decade ago provided just the right combination for the renaissance of this once rundown section of the city.²³

In Japan, a number of universities and hospitals moved out of city centers to the suburbs because of superannuation of their equipment and cramped sites. Although it is another problem as to whether these universities are as valuable as Harvard and MIT, it does seem that collaboration with the industrial sector is less of a consideration in their decisions to move. Existing industries are isolated from universities, deprived of opportunities for new investment by newly constructed parks, and, thus, go into decline. This is just a tragedy that means local areas will lose their valuable asset of existing industrial concentration.

These problems, including how to promote industrial policy that is appropriate for the region's specific character, what kind of support measures will be focused and efficient, how to avoid overlapping investments, and how to promote efficient collaboration with industries and universities, can be summarized into the question of how the regions can concentrate their limited resources efficiently on industrial sectors. Additionally, what kind of regional unit is proper is also a problem at the decision-making stage. A unit that can function actually and concretely should include only cities, towns, and villages that are familiar with their regions and can demonstrate initiative, originality, and creativity. And as a premise, budgetary and other authority must be devolved to them, and they have to have sufficient scale and capability to act

²³“The Rebirth of Older Industrial Cities” 6.

autonomously. From this standpoint, the introduction of the *doshusei* would be effective for industrial policy.

Breakaway From Following the United States

The second major problem is that the U.S. model can be seen behind industrial policies in Japan. A stereotypical image of the United States in Japan is that, even after the global competitive edge in the manufacturing industry was lost, the United States overcame the change of the industrial structure by creating new industries such as IT and is always leading the world. In some respects, this is inevitable because, after World War II, Japan worked feverishly to catch up with and overtake the United States. It is necessary, however, to reconsider this image now. Even if this image is basically correct, it is difficult to say that all the areas of the United States are enjoying the fruits of this change of the industrial structure.

The United States is a vast country with abundant natural resources. As such, many U.S. industries are based on natural resources; these include the oil industry, tourism based on the natural environment, agriculture based on the wide availability of land, and so on. It is clear that Japan cannot ever compete with the United States in such industries. It is also true, though, that many parts of the United States depend economically on these industries. Moreover, it is necessary to recognize that, even in the manufacturing industry, the background of the United States is quite different from that of Japan, because of the strong support from the federal government in connection with national defense.

Roughly half of total U.S. R&D is funded by the federal government and roughly two-thirds of this is defense R&D. In 1988, total U.S. defense R&D was \$40.1 billion contrasted to \$1.1 billion in the Federal Republic of Germany and \$0.4 billion in Japan.

Government financed-R&D in Germany is roughly one-third of total R&D and about one-fifth in Japan.²⁴

In the name of enhancing the national security, the federal government sponsored an expansion in the technology base of the nation. But it was a dual-use policy: Government-funded R&D for defense purposes could generate new product and process ideas that could be put to commercial use as well as that of national security.... In fact, the major export industries of America in the postwar period all received both substantial government R&D and purchasing support in their formative, low-productivity years. This includes aircraft, computers, electronics, telecommunications, and instruments.²⁵

Furthermore, despite these advantages, which Japan does not have, there are unavoidable economic gaps between regions in the United States. In fact, there are many regions that are still struggling to adapt to new alternative sectors after the traditional strength of heavy industry declined. It is difficult to say that every region has succeeded in changing its industrial structure to follow the example of Silicon Valley. Although the U.S. economy was reborn with the development of the IT industry, symbolized by Silicon Valley, this cannot be a valid model for Japan only by superficial imitation. The reason why Silicon Valley is Silicon Valley is because it is Silicon Valley. It is necessary to learn from examples from all over the world, including the United States, that aimed to become the next Silicon Valley, constructed research parks, and – in the end – failed.

Although it is true that negative effects of the Japanese-style system have arisen recently, not all problems can be solved just by introducing U.S. models into Japan. The most suitable systems vary according to the economic and social environment, industrial structure, and, even more, history and culture. Therefore, what is most important is to recognize the original regional character and then establish a system that can respond rapidly and flexibly to the dizzying pace of expanding globalization and changes in economic circumstances.

²⁴“Cross-National Comparisons” 211.

²⁵“Competitive Dynamics 2.

In Japan, however, there are many cases in which systems have been introduced from overseas only superficially without sufficient analysis and, as a result, have not functioned well. Lifetime employment, for instance, is often cited as a typical example of the negative effects of the Japanese style-system. In order to change this system, however, improvement of the outplacement market and creation of new employment opportunities are indispensable, and, if lacking, any change of the system can only amplify social unrest.

In addition, there has been a tendency to shift from the seniority-based wage structure, which is also noted as a typical example of the negative effects of the Japanese-style system, to a merit-based wage system. Because of the uniform introduction of this system without any analysis of which type of industry or occupation it is suitable for, or how to ensure transparency and fairness in the evaluation criteria and methods, in many cases only the negative effects are seen as opposed to the essential purpose, which is to revitalize employees and bring out their potential. In fact, in some cases, this system has been introduced only as an excuse to reduce total labor costs. As to the operating officer system, which many companies have started to introduce recently, its essential purpose is to streamline and vitalize the board, which has become a mere figurehead, and change it into a real board for discussion of corporate strategy to respond to rapid changes in economic circumstances, as well as to devolve the authority to operation divisions. In many cases, however, this system has been misused to reward employees by giving them the title of “officer” in exchange for wage restraint. This is because it is difficult for most companies to increase both wages and the number of board members. These failures have been caused because such companies tend to try to solve their problems by introducing these new systems without considering the essential nature of these systems and also without reforming the structure of their organizations.

To begin with, even in the United States, these systems are not popular in all types of industries, occupations, and job classes. In addition, there are favorable opinions of the Japanese-style system:

Japanese manufacturing, which aims to produce better products by solving production problems continuously and elaborately in QC circles and by joining together from the bottom to the top, can easily reach a high level in a short period.... The background factors are the original Japanese labor-and-management system and the Japanese sense of belonging.... The reason why it is possible depends on the high ratio of permanent employees and the guarantee of the lifetime employment system.... the Japanese-style employment system, which is often criticized as old-fashioned, is really the most suitable for manufacturing.²⁶

It is important to analyze and refer to various systems such as those in the United States. It is more important, though, to establish an original Japanese system by minimizing its negative effects and maintaining its strong points. The Mitsui Trust Holdings research report advises: “We had better recall the fact that the revival of the United States in the 1990’s was generated not only because they analyzed Japan thoroughly, but because they did not try to imitate Japan, instead attempting different approaches.”²⁷

Of course, there are many lessons that can be learned from the United States.

For example, the headquarters of many large companies have been decentralized widely across entire country. This is quite the opposite of what happened in Japan during the “Bubble Economy,” when many companies, including those in Osaka, which is the second largest city in Japan, scrambled to move their headquarters to Tokyo. It is often said that excessive concentration in the Tokyo metropolitan area is caused by the concentration of administrative power in this area. This is only one reason, however. For example, corporate recruitment policies

²⁶“Chugoku wa Nippon o Oikosenai!” 99.

²⁷“1990-Nendai no Nichibei-Sangyo-kozo” 32.

that give priority to not the excellence, but to the name, of a university (especially universities in Tokyo), or differences between headquarters and branch offices in treatment have become factors behind the outflow of human resources from outlying regions and the gaps between Tokyo and those areas. Of course, decentralization of companies' headquarters in the United States depends on historical and geographical factors. It is necessary, however, to analyze and refer to the reasons why they stay in outlying areas without concentration and why the United States can be a multipolar nation. The strategy of New Balance, as follows, offers one suggestion:

New Balance is a traditional manufacturing company that has facilities in two of our study cities – Boston and Lawrence – and reflects both the value of remaining in the cities where they began as well as moving to cities where costs were reasonably low. According to Richard Shanler, manager of Facilities for New Balance, “We have deep roots in Boston. We were founded in 1906 and have been in the Boston area since the beginning.” The company has just opened its new corporate headquarters within walking distance of its original facility. But the company also located new operations in Lawrence in 1981, purchasing an old mill building and refurbishing it for manufacturing and office space. Its 24-year commitment to Lawrence is part strategic. The company has three other locations in Maine. Lawrence is on the right transportation corridor. But, as Shanler notes, “We were in the city when it was the arson capital of the United States. For a while, being in Lawrence meant that we couldn't always recruit our first choice for a position. However, we don't have that trouble any longer. Lawrence is coming back.” Such urban “pioneers” often benefit from finding a site when property values are quite low and see the value of their location rapidly increase as the city burnishes its new reputation and attracts new investment.²⁸

In the United States, too, there are regions in the southwest where the climate is warm, where the population is increasing because of an influx of retirees, and, accompanied by that, where the concentration of new service industries is growing. Although every region cannot enjoy the advantages of climate, this suggests one possibility for regions in Japan facing the acceleration of an aging society. Further, not only by depending on natural conditions such as

²⁸“The Rebirth of Older Industrial Cities” 7.

climate, but also by the promotion of innovative measures and improvement of circumstances and infrastructure, this possibility will be further enhanced.

Needless to say, for Japan, aiming to create new industry based on high technology, it is important to analyze and refer to the critical essence and success factors of Silicon Valley.

CHAPTER 9
THE CONCENTRATION OF COMPANIES
THAT SUPPORT INDUSTRIES IN OUTLYING AREAS

Annalee Saxenian, Dean of the School of Information Management and Systems and Professor in the Department of City and Regional Planning at the University of California at Berkeley, who is especially well versed in the social and economic organization of production in technology regions, describes the advantages of Silicon Valley compared with the Route 128 region near Boston, once also a leader in the electronic industry, as follows:

Silicon Valley has a regional network-based industrial system that promotes collective learning and flexible adjustment among specialist producers of a complex of related technologies. The region's dense social networks and open labor markets encourage experimentation and entrepreneurship. Companies compete intensely while at the same time learning from one another about changing markets and technologies through informal communication and collaborative practices; and loosely linked team structures encourage horizontal communication among firm divisions and with outside suppliers and customers. The functional boundaries within firms are porous in a network system, as are the boundaries between firms themselves and between firms and local institutions such as trade associations and universities.

The Route 128 region, in contrast, is dominated by a small number of relatively integrated corporations. Its industrial system is based on independent firms that internalize a wide range of product activities. Practices of secrecy and corporate loyalty govern relations between firms and their customers, suppliers, and competitors, reinforcing a regional culture that encourages stability and self-reliance. Corporate hierarchies ensure that authority remains centralized and information tends to flow vertically. The boundaries between and within firms and between firms and local institutions thus remain far more distinct in this independent firm-based system.²⁹

The characteristics of the Route 128 region are quite applicable to large Japanese companies suffering from systemic fatigue, and are also typical of rigid Japanese-style organizations, including not only companies, but also governments and municipalities. On the

²⁹“Regional Advantage” 2.

other hand, from studying the model of Silicon Valley, it can be easily imagined that such measures in Japan as flattening of companies' organizations, collaboration with industries and universities, creation of clusters, and creation of venture business, are obviously inspired by the success of Silicon Valley. At the same time, however, Saxenian also comments:

The successes of Japanese industry are similarly attributable, at least in part, to network organizational forms. The Japanese corporation is more internally decentralized and more open to the surrounding economy than the traditional large American corporation. Producers of electronics, autos, and machine tools, for example, rely on extensive networks of small and medium-sized suppliers, to which they are linked through ties of trust and partial ownership. Although Japan's large firms historically exploited suppliers, many increasingly collaborate with them, encouraging them to expand their technological capabilities and organizational autonomy. Like their Silicon Valley counterparts, these producers tend to be geographically clustered and depend heavily on informal information exchange as well as more formal forms of cooperation.³⁰

Best echoes:

Networking, or long-term consultative relations, replaces both the impersonal, inter-firm market relations and the bureaucratic internal coordination of the autarchic firm from the age of price-led competition. Chris Freeman³¹ has described the organizational shift as follows. "... Instead of the rigid hierarchy within groups with great prestigious firms at the top and small weak ones at the bottom, the parent-firm transformed its position into a nucleus within an industrial combine of "kogaisha" ("children" or "daughter" companies).³²

These observations are clearly different from the images the Japanese currently hold about Japanese company groups. Certainly, it is true that in *keiretsu* groups, the parent companies give technical guidance to their subsidiaries and achieve the development of new products and improvement of the production process, and, as a result, have been enhancing their competitive

³⁰"Regional Advantage" 4.

³¹Professor Emeritus of Science Policy at the University of Sussex, his main research is the economics of innovation and technology. "Networks of Innovations: A Synthesis of Research Issues" 505.

³²"Competitive Dynamics" 14.

edge. Now, however, negative and critical opinions about *keiretsu* have become quite widespread. It is necessary, then, to analyze the reason for this recognition gap.

Saxenian's and Best's research was presented in the 1990's, and it is possible to understand that the major reason is the change in the structure of Japanese companies during this period. Under the conditions of economic stagnation in the 1990's, Japanese companies were forced to undertake massive cost reductions. By right, the parent companies needed to "treat suppliers more as partners and less as rivals over the division of thin margins."³³ In many cases, however, parent companies imposed a considerable part of the cost reduction burden on their subsidiaries. This means, as opposed to the opinions described above, that the vertical hierarchy has actually been continuously preserved in Japanese company groups, even if it was not particularly noticeable in the period of rapid economic growth.

Recently, of course, there have been a number of cases in which parent companies have guided their subsidiaries to expand outside the group business, and this is a desirable tendency. According to Saxenian, "Suppliers in the traditional system were subordinate producers, often dependent on a single large customer." Further, she introduces one local executive as saying: "The ideal situation was to hold a preferred position with suppliers, but not have an exclusive relationship. Dependence makes both firms vulnerable."³⁴ Certainly, it would be ideal if expansion to outside the group business were intended to promote a sense of independence on the part of subsidiaries, foster them as more equal partners, and encourage horizontal communication and informal information exchange in outlying regions, such as in Silicon Valley. Their real

³³"Competitive Dynamics" 9.

³⁴"Regional Advantage" 148.

intention, however, is they cannot afford to take care of their subsidiaries during a period of economic stagnation and the intensive cost reductions that result from this stagnation.

In addition, one of the major environmental changes surrounding SMEs in recent years is the drastic transformation of the financial environment, especially the credit crunch – which means the reluctance of banks to loan, or so-called *kashi-shiburi*. Originally, the rate of capital accumulation of SMEs was not sufficient and their degree of dependence on loans was high, but this problem was not exposed because this situation had been held in equilibrium by stable refinancing under the main-bank system. Now, however, because of the bad loan problem of financial institutions, banks are focusing excessively on improvement of their own balance sheets and reduction of total assets. Therefore, they continue to be reluctant to make loans, only because the SME's finances are unsettled, without considering their potential and technological capabilities.

In the first place, in order to fundamentally and clearly solve the bad loan issue, it is indispensable to solve the problem of heavy debtors represented by companies in the real estate, construction, and distribution industries. The solution to this problem, however, has been delayed and the burden shifted onto the SMEs.

Of course, under these circumstances, various kinds of support measures for SMEs have been undertaken by central and local governments. Most of these involve the provision of temporary loans, though they may be necessary as emergency measures, and they do not lead to the resolution of the fundamental problem. At the same time, some observers have been critical, claiming that these are mere bailout measures that only prolong the life of inefficient and unnecessary companies with no sense of self-reliance.

What is worth noting among these measures, however, is the “Action Program for the Enhancement of the Function of Relationship Banking” announced by the Financial Service

Agency in 2003. The aim of this program is to enhance the community-based management of regional banks, which are well versed about local companies and economic conditions, and, because of that, can attempt to ensure a smooth flow of funds to regional companies. At the same time, they can promote the vitalization of the local economy and help solve the bad loan problem of regional banks. This means that different sectors in the region will try to collaborate through an active and dense network of communications to develop the regional economy, so the above goals can be achieved. It will also be necessary to review the fund supply system depending on loans and to vitalize new fund supply measures such as capital investment.

In the real world, however, it will be inevitable for some SMEs to be forced out of business. Another problem is how to utilize the empty buildings and land left by these businesses. In most cases, SMEs are concentrated in the inner city. Therefore, some municipalities tend to regard these districts as a nuisance, change the land regulations, and try to convert them for other uses. This behavior, however, causes them not only to lose the advantages of concentration of resources, but also discourages new companies from coming into the area. In districts where SMEs are highly concentrated in Japan, such as Ota-ku in Tokyo or Higashiosaka in Osaka, each SME has utilized its proximity to other similar enterprises, exchanged horizontal and informal information, and enhanced their competitive edge by competing and collaborating with one other. In other words, the corporate culture in these districts has been similar to that of Silicon Valley. To forfeit the advantages of this concentration means nothing but to lose valuable regional assets. Thus, it is necessary for municipalities to recognize these districts as important infrastructure that supports regional industry, to secure the land use and regulations, and even more importantly, to attract new companies, as described below:

Encourage cities to protect land currently zoned for industrial use from encroachment through the creation of planned manufacturing districts. [Massachusetts] State zoning

laws need to permit cities to create planned manufacturing districts (PMDs) that allow older industrial areas to be preserved and buffered from encroachment by other uses (residential, retail etc.). PMDs replace zoning on land already zoned for manufacturing by creating an industrial area in which land use is specifically defined and uncontestable. A number of cities around country, Chicago in particular, are seeing a rebirth in a number of their industrial areas because firms can make investment in equipment and expansion without worrying about encroaching uses forcing them out.³⁵

³⁵“The Rebirth of Older Industrial Cities” 11.

CHAPTER 10
DESIRABLE POLICY FOR THE PROMOTION
OF REGIONAL INDUSTRIAL DEVELOPMENT

As described so far, the most important unit is the city, not only for the introduction of the *doshusei*, but also to promote decentralization and vitalization of regions, as well as the regional industrial development policy that is the most suitable for each city to establish a self-reliant industrial basis. This has been explored in this paper by surveying the Japanese industrial structure and present industrial policies. Some of them, as noted above, are pointed out in “The Rebirth of Older Industrial Cities: Exciting Opportunities for Private Sector Investment.” As to points already cited in the present paper:

- It is most important to analyze the strengths and weaknesses in the regions considering their original character with regard to their industrial history, concentration of enterprises, and culture, and to disseminate their strengths positively and analyze and eliminate their weaknesses. Based on this, it first becomes possible to try to create the most suitable industrial policy. In addition, the leaders and staff members of local governments have to collect various kinds of information and simultaneously enhance their own abilities. It will be advisable to invite outside experts; in some cases, however, there may be irresponsible local governments that might want to leave all the decision-making to outside experts. They should never forget that they are the most important players.
- In the implementation phase of industrial policy, it is necessary to focus on how to effectively concentrate limited resources. The results of lukewarm tax incentives or subsidies are less important and helpful than exploring the needs of companies and trying to improve circumstances, including infrastructures.

- The negative effects of the vertically divided administration in Japan add a considerable amount of time to coordination and decision-making, and this is one of the most serious obstacles for companies, which are being required to respond rapidly to changes of circumstances. The organization of local governments also needs to be restructured for rapid response. As a reference, the introduction of the city manager system as in the United States is worth considering.
- Local governments should recognize the existing industrial concentration as an infrastructure that supports regional industry and try to maintain and enhance its function in an effort to attract new companies.
- In order to implement these measures, it is important for local governments to collaborate with various business and industrial sectors, especially with regional banks, which are versed in the regional economic conditions and corporate climate. It is also necessary to review the fund supply system depending on loans and to vitalize new fund supply measures, such as capital investment.

And then the newly added suggestions.

- Regarding universities in Japan, which are important players in collaboration with companies, the ratio of national and public universities is higher than in the United States. This situation also can be confirmed in the R&D budgets. According to 1998 data, the ratio of national and public universities to private universities in the R&D budget is 49.4 percent vs. 50.6 percent.³⁶ It is widely believed in Japan that universities, especially national universities, are more hierarchical than ordinary companies. National universities

³⁶The Ministry of Public Management, Home Affairs, Posts and Telecommunications, Statistics Bureau "Kagaku Gijutsu Kenkyu Chosa Hokoku."

were changed into national university corporations in 2004, aiming at more effective management. It is expected that this shift will lead to the reform of their structures and functions. In addition, with regard to the promotion of regions, it is important to be able to cultivate the human resources that are required in the regions; the key points here are innovative educational systems and human resource development of the regions. For example, public universities, such as prefectural universities, should analyze why they have been established in their particular regions and enhance community-based research as well as human resource development.

- Regarding the service industry, of course, it is important to promote and encourage new entry by the relaxation of regulations, to privatize and industrialize the services of the public sector, and to create new service industries that respond to the changes of social structure. The service industry, however, is characterized by the fact that its concentration attracts more concentration. It would be effective to locate the public facilities that are necessary as a result of the devolution of authority in the major urban areas of *doshu* and try to establish these areas as cores, not only of the service industry, but of other industries as well. “Locate state and municipal facilities in urban locations to stimulate creation of amenities and other attractions to spur private sector commercial and industrial investment. We recommend that the state and cities prioritize the location of public facilities in urban settings as ‘pump primers.’”³⁷
- Among the service industries is tourism. Surveying the Japanese tourism industry according to the number of inbound and outbound travelers by country in 2002, the outbound number from Japan was 19.7 million, which ranked ninth; the inbound number,

³⁷“The Rebirth of Older Industrial Cities” 17.

however, was only 4.8 million ranking 33rd. As a natural result of the 14.9 million outbound excess, the balance of international tourism payments is a deficit of ¥3,600 billion. Attracting tourists from abroad is a serious problem, and the central government is now running a “Visit Japan Campaign.” Regions, especially those in the same *doshu*, are expected to cooperate with each other to enhance tourism resources by synergy. Of course, it is also necessary for local governments to recognize their particular and competitive resources, such as industrial tourism in Aichi Prefecture, to improve them, and to disseminate attractive information. Most of all, the mistake made during the bubble economy by which numerous resort facilities were constructed all over Japan, most of them ending up in failure, should never be repeated.

CHAPTER 11

CHALLENGES FOR THE FUTURE

Generally speaking, the most serious obstacle to the promotion of decentralization in Japan is said to be the resistance of bureaucrats in the central government ministries and agencies, who want to preserve their authority, and of politicians, who want to maintain their vested interests through influence-peddling. No doubt, this is a serious obstacle and, in fact, it is undeniable that many reform plans have been watered down because of this. The most serious problem, however, may be in the Japanese “stability orientation,” consciousness of dependence on the government, and lack of self-responsibility. What is caused by these is a lack of consciousness of self-government. Not only for the introduction of the *doshusei*, but also for every kind of promotion of decentralization, what is most important and indispensable for residents is their strong will to improve their regions on their own.

On the other hand, if decentralization is achieved and regions with self-responsibility are established around Japan, this will ensure that inter-regional competition will arise. Naturally, some regions will develop, while others will decline. They cannot depend on the central government or *doshu*, however, and preparation to deal with this situation is vital. Actually, even after the *doshusei* is introduced, the concentration into certain areas in the *doshu* is inevitable, and this will be effective in order to address the excess concentration in the Tokyo metropolitan area. On this point, Shunichi Furukawa, Assistant Professor at Tsukuba University, who was originally a government worker at the Ministry of Home Affairs and researches decentralization, advocates “multipolar concentration,” and the “concept of 3-million-cities,” which means to establish and arrange cities on the scale of 3 million inhabitants all over Japan in a balanced manner:

So far, the argument has been conceived through an antagonistic concept – centralization or decentralization. In order to implement regional development and to enjoy the fruits of decentralization, it will be difficult for mere decentralization to function effectively. Thus, a strategy aimed at increasing concentrated poles will become necessary.... to promote regional dispersion without restrictions and conditions means that small community centers would be built everywhere, and, as a result, the power of Tokyo would increase and, paradoxically, centralization itself would be intensified.³⁸

Naturally, this concept raises anxiety among the general public. In the mergers of cities, towns, and villages that are now being promoted, residents of towns and villages that are likely to be absorbed by larger cities are understandably concerned that their regions may decline or that the future situation may be disadvantageous and inconvenient for them. In order to assuage this fear, policy decision-makers in local governments must carefully explain both the positive and negative effects of the proposed programs and present a clear and concrete picture of the future once this concept is put into practice.

Based on the premises described above, a change in the consciousness of the entire nation is indispensable, and it is necessary to recognize that, without this, not even the slightest progress can be made with any kind of decentralization policy.

³⁸“Takyoku-shuchu • Bunkengata-kokudokeisei” 168.

CONCLUSION

After the bubble economy collapsed, the limitations of many Japanese-style systems and practices were exposed, and the nation has been overshadowed by uncertainty and a sense of stagnation. In order for Japan to extricate itself from this situation, structural reform, which comprehensively implements financial reform, social security reform, economic reform and so on, is vital. So far, the importance of decentralization has been mentioned mainly in connection with industrial promotion policy. But decentralization is indispensable in these reforms, too. Although there are still issues including legal problems that remain to be solved, the introduction of the *doshusei* can doubtless be helpful and effective in this regard.

It is natural and inevitable that stepping into the unknown always gives rise to anxiety and unrest. It is not true, though, that every Japanese-style system has been deemed undesirable and that every strength has been lost. What is important is to move ahead in an assured manner, analyzing the various advantages and disadvantages of proposals and policies coolly and calmly without fueling unnecessary concern.

In time, the people's consciousness of self-government to reform their regions on their own will establish self-reliant regions, which will bring about the vitalization of Japan as a whole. The policies of decentralization represented by the introduction of the *doshusei* are expected to play a vital role in leading to a new society.

TABLES AND FIGURES

Table 1

Cumulative Long-term Debt of Government³⁹

trillion yen			
	1994	1999	2002
Central government	269	449	536
Straight government bonds	207	332	421
Local government	106	174	193
Duplication	△ 7	△ 22	△ 31
Total	368	600	698
Debt/ GDP ratio	74.8%	118.2%	140.3%

Table 2

Allocation of Tax Resources Between Central and Local Governments³⁹

			billion yen		
Tax revenue			Tax allocation		
National tax	45,844	57.4%	Central government	29,635	37.4%
Local tax	33,379	42.1%	Local government	49,588	62.6%
Prefecture	13,804	17.4%			
City, town, village	19,575	24.7%			
Tax total	79,223	100.0%	Allocation total	79,223	100.0%

※ Allocation is numerical value after adjustment by local allocation tax and local transfer tax

Local tax revenue/ total local revenue ratio:34.4%

³⁹Data from the Ministry of Finance.

Table 3
The Number of Cities, Towns, and Villages
Belonging to Councils of Municipal Amalgamation (2001)⁴⁰

	March	June	September	December
The number of all cities, towns and villages (A)	3,227	3,224	3,224	3,223
The number of cities, towns and villages belonging to councils of municipal amalgamation (B)	607	1,206	1,657	2,026
(B)/ (A)	18.8%	37.4%	51.4%	62.9%

⁴⁰Data from the Ministry of Public Management, Home Affairs, Posts and Telecommunications

Table 4

Japanese *Doshu* in Comparative Perspective

		Area km ²		Population M		GDP bn\$	GDP/Person\$
Russia	1	17,075,200	7	143,782	10	1,287	8,951
Canada	2	9,984,670	34	32,508	11	958	29,470
USA	3	9,631,418	3	293,028	1	10,980	37,471
China	4	9,596,960	2	1,298,848	2	6,449	4,965
Brazil	5	8,511,965	5	184,101	9	1,379	7,490
Australia	6	7,686,850	52	19,913	16	570	28,624
India	7	3,287,590	2	1,065,071	4	3,022	2,837
Mexico	14	1,972,550	11	104,960	12	942	8,975
Indonesia	16	1,919,440	4	238,453	15	758	3,179
France	47	547,030	20	60,424	7	1,654	27,373
Thailand	49	514,000	19	64,866	19	476	7,338
Spain	50	504,782	29	40,281	13	886	21,996
Sweden	54	449,964	84	8,986	35	238	26,484
Japan	60	377,835	10	127,333	3	3,567	28,013
Germany	61	357,021	14	82,425	5	2,271	27,552
Finland	63	337,030	110	5,215	48	142	27,232
Malaysia	64	329,750	46	23,522	38	207	8,800
Norway	66	324,220	114	4,575	42	172	37,599
Poland	68	312,685	32	38,626	24	427	11,055
Italy	69	301,230	23	58,057	8	1,552	26,732
Philippines	70	300,000	12	86,242	25	391	4,534
New Zealand	73	268,680	120	3,994	57	85	21,283
Britain	76	244,820	21	60,271	6	1,664	27,609
Greece	94	131,940	74	10,648	36	212	19,911
Korea	107	98,480	24	48,598	14	855	17,593
Portugal	109	92,391	75	10,524	41	182	17,294
Austria	112	83,870	88	8,175	33	246	30,093
<i>Hokkaido</i>		83,455		5,683		198	34,889
Ireland	117	70,280	121	3,970	53	117	29,474
<i>Tohoku</i>		66,889		9,818		317	32,327
<i>Chubu</i>		59,983		21,010		846	40,282
<i>Chugoku/Shikoku</i>		50,718		11,887		403	33,921
<i>Kanto</i>		45,006		42,909		1,810	42,177
<i>Kyushu</i>		44,443		14,764		444	30,078
Denmark	130	43,094	108	5,413	43	168	31,034
Netherland	131	41,526	58	16,318	20	461	28,251
Taiwan	134	35,980	47	22,750	17	529	23,253
Belgium	136	30,528	77	10,348	27	298	28,797
<i>Kinki</i>		27,334		20,856		760	36,453
Luxemburg	167	2,586	163	463	93	25	54,032
Hong Kong	169	1,092		6,855	37	212	30,926
Singapore	175	693	118	4,354	55	109	25,035

Table 5**Financial Conditions of Projected *Doshu***

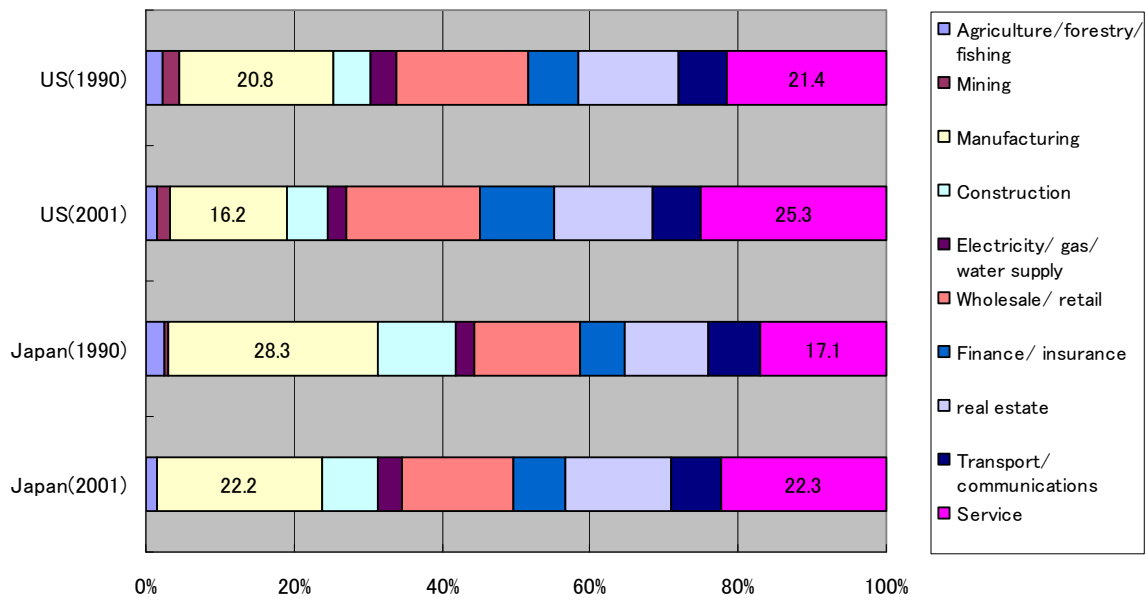
billion yen

	Scale of Budgets(A)	Local Tax Revenues	National Tax Payments	Tax Total(B)	(B)/ (A)
Hokkaido	4,878	1,147	1,501	2,648	54%
Tohoku	7,179	1,738	2,166	3,904	54%
Kanto	25,439	13,838	29,974	43,812	172%
Chubu	13,026	5,687	8,610	14,296	110%
Kinki	12,742	6,087	11,480	17,567	138%
Chugoku/ Shikoku	8,843	2,486	3,509	5,994	68%
Kyushu	10,140	2,464	3,230	5,693	56%

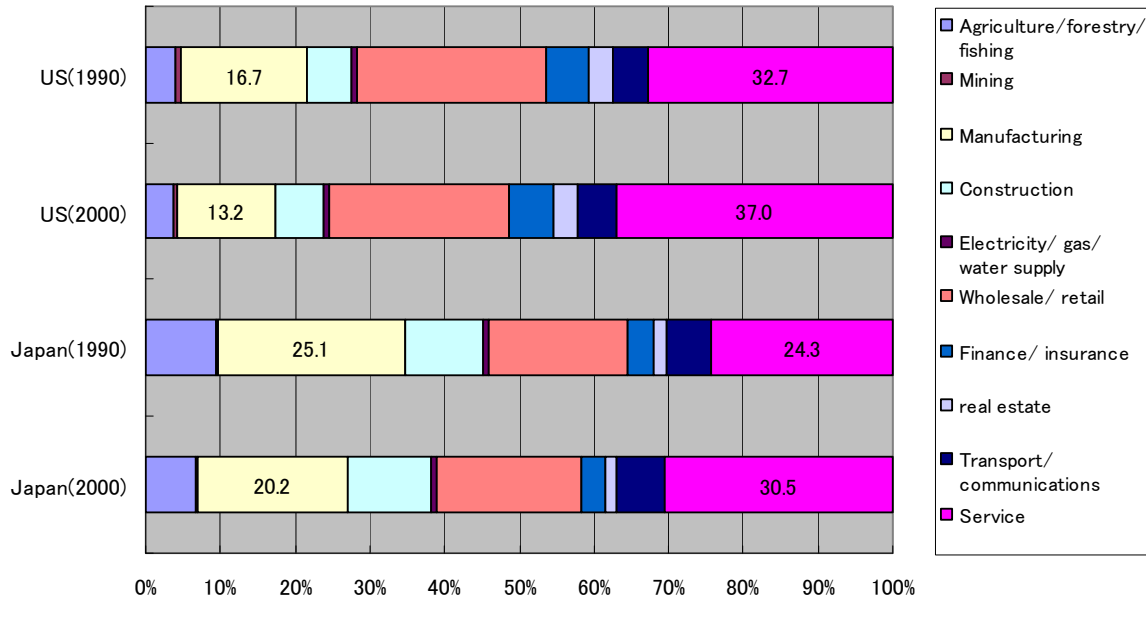
Table 6**Grants, Subsidies, National Tax Payments, and Adjustments**

	Grant and Subsidy	National Tax Payments	(1)Amount of Adjustment	(2)Amount of Adjustment
Hokkaido	2,357	1,501	856	91
Tohoku	3,573	2,166	1,407	△ 233
Kanto	4,670	29,974	△ 25,304	△ 19,026
Chubu	3,788	8,610	△ 4,821	△ 6,386
Kinki	3,063	11,480	△ 8,416	△ 7,003
Chugoku/ Shikoku	3,963	3,509	454	△ 1,160
Kyushu	5,192	3,230	1,962	△ 333

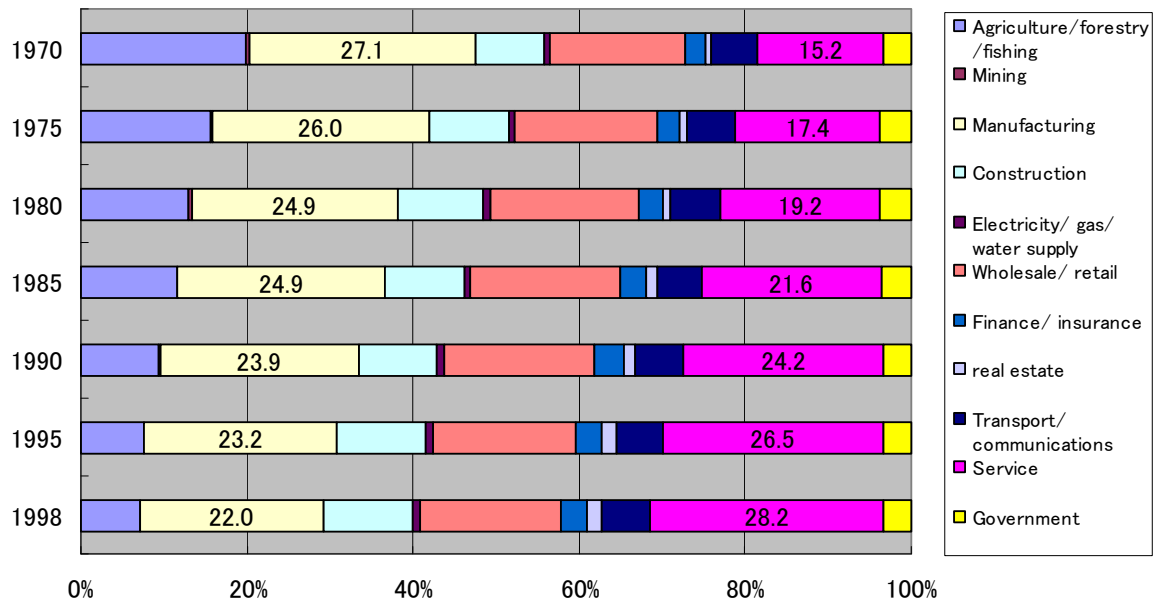
(Figure-1) Share in nominal GDP by industries in the U.S. and Japan



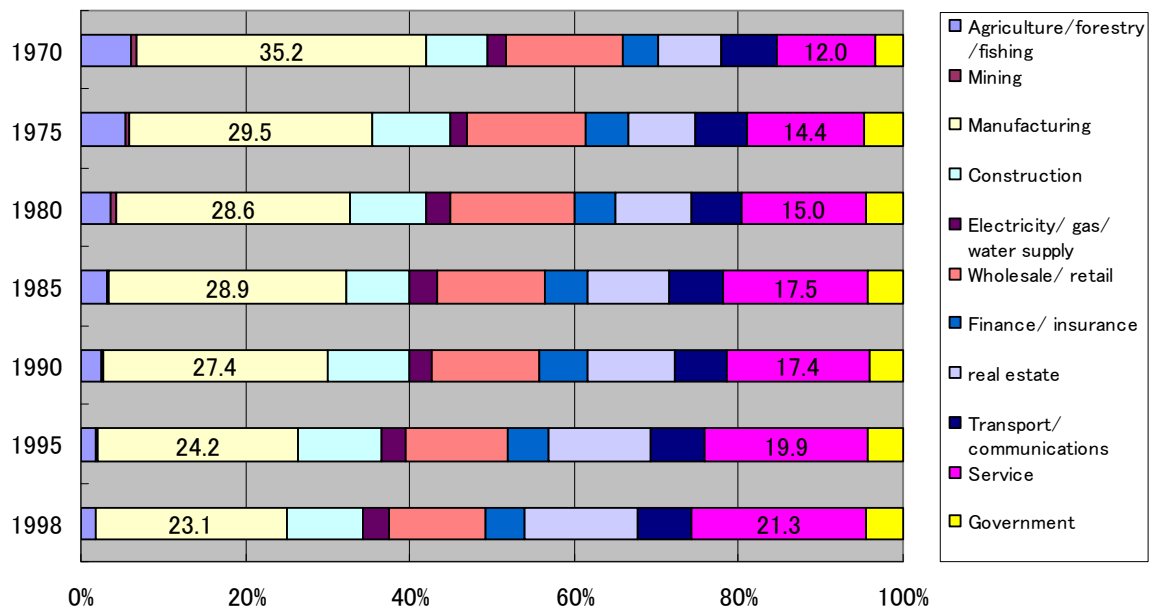
(Figure-2) Share in the number of employees by industries in the U.S. and Japan



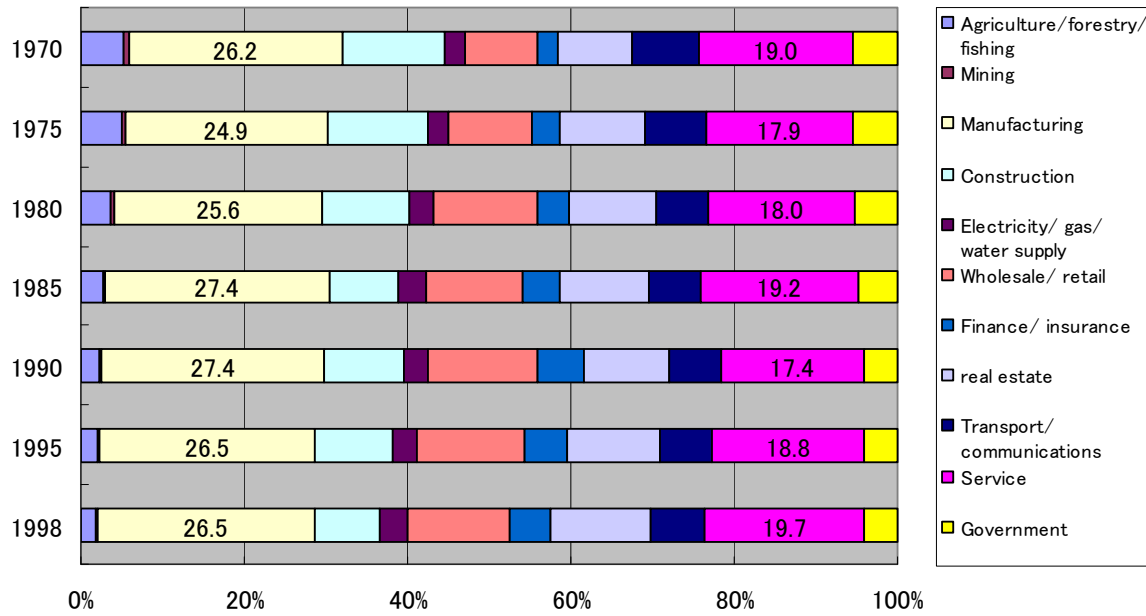
(Figure-3) Share in the number of employees by industries in Japan



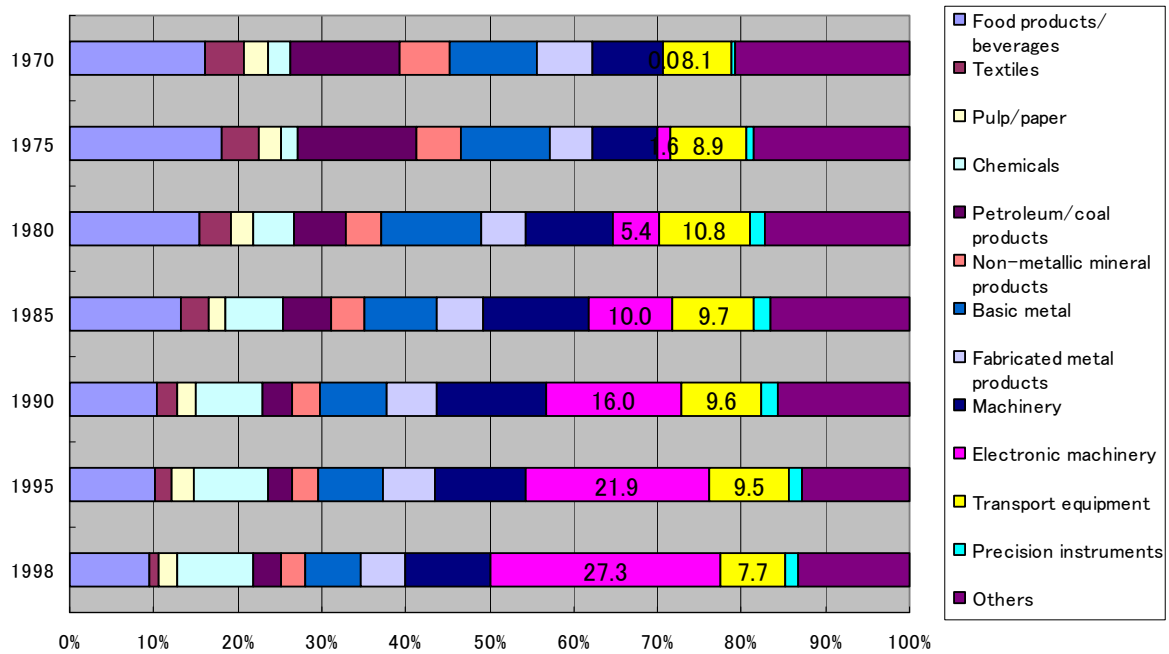
(Figure-4) Share in nominal GDP by industries in Japan



(Figure-5) Share in real GDP by industries in Japan



(Figure-6) Share in real GDP by industries of manufacturing in Japan



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